

# **Section A**

## ***Executive Summary***

## INTRODUCTION

This section of the report is intended to provide Management with an executive-level summary of the most noteworthy performance information to date. All information is current as of the end of April 2002 unless otherwise noted.

The section begins with a description of notable accomplishments that have occurred since the last monthly report and are considered to have made the greatest contribution toward safe, timely, and cost-effective clean up. Following the accomplishment section is an overall fiscal year-to-date summary analysis addressing cost, schedule, and milestone performance. Also included in this section is a contract to date performance table. Overviews of safety ensue. The next segment of the Executive Summary, entitled Breakthroughs and Opportunities for Improvement represents potential significant improvements over the established baseline. The Critical Issues section is designed to identify the high-level challenges to achieving cleanup progress.

The next section includes FY 2002 EM Management Commitment Milestones and Performance Incentives.

Concluding the Executive Summary, a forward-looking synopsis of Upcoming Planned Key Events is provided.

Note: Milestones tracked and reported in the Executive Summary are FY2002 Contract Milestones and consist of two Department of Energy levels. In descending order these levels are 1) Department of Energy-Headquarters (HQ), and 2) Richland Operations (RL). Because it is also useful to distinguish milestones based on specific drivers, the Site applies a designation for those milestones created or tracked to meet the requirements of Enforceable Agreements (EAs). When a milestone satisfies both an EA requirement and a milestone level, it is categorized as both. However, in order to avoid duplicate reporting, this report accounts for each milestone only once. Where an overlap exists between EA and a level (i.e., HQ or RL), the milestone is reported as EA. Additionally, Tri-Party Agreement (TPA) Major and Interim milestones are EA milestones. TPA milestones that are not enforceable are called Target milestones and are included in the milestone tables found in the applicable Project Sections. These tables include FY2001 through FY2006 milestones.

## NOTABLE ACCOMPLISHMENTS

**Spent Nuclear Fuel (SNF) Movement Activities** <sup>3</sup>/<sub>4</sub> During this reporting period, eight Multi-Canister Overpacks (MCOs) containing 37.25 Metric Tons of Heavy Metal (MTHM) were shipped from K West (KW) (61 MCOs and 285.81 MTHMs, cumulatively). To date, the Spent Nuclear Fuel (SNF) Project is 33 working days (17 MCOs, 79.62 MTHM) behind the baseline schedule commitment to move 720.1 MTHM by the end of fiscal year (FY) 2002. The project is on schedule for completion of all fuel movement by July 2004.

### Stabilization of Nuclear Material

**Residues** — A total of 208,426 grams of Sand, Slag, and Crucible (SS&C) material were packaged into 24 Pipe Overpack Containers (POCs) during April. Processing of SS&C continues to exceed the baseline schedule by twenty-five (25) percent. Shipment of POCs containing SS&C was initiated and 44 POCs were shipped to the Central Waste Complex (CWC).

**Solutions** <sup>3</sup>/<sub>4</sub> During April, the Solutions Stabilization Project stabilized 260 liters of material. The precipitation feed was shifted to the Double Pass/Single Pass Filtrate Solution family in mid-April. This represents the last major Solution family (~1,240 liters) to stabilize.

**Project W-460** <sup>3</sup>/<sub>4</sub> All Project W-460 construction activities have been completed and final as-built field drawings, punch list and exception items have been completed and closed. The Construction Completion Document (CCD) that will officially close the project was submitted to RL for approval.

**Thermal Stabilization & Bagless Transfer System (BTS)** <sup>3</sup>/<sub>4</sub> During April, 33 Bagless Transfer Cans (BTCs) were welded and thirty furnace runs completed in 234-5Z and 2736-ZB. A total of 564 BTCs have been made in the 234-5Z and 2736-ZB facilities as of the end of April.

**Mixed Low Level Waste (MLLW) Treatment** <sup>3</sup>/<sub>4</sub> Forty-two cubic meters of macroencapsulated debris were received from ATG, Inc. for disposal in the mixed waste trench.

## PERFORMANCE DATA AND ANALYSIS

The following provides a brief synopsis of overall PHMC Environmental Management (EM) cost, schedule, and milestone performance.

### FY 2002 Schedule and Cost Performance

**Schedule Performance** — There is a Fiscal Year (FY) 2002 year-to-date 0.8 percent (\$2.4 million) unfavorable schedule variance that is within the established 10 percent threshold. The 300 Area Cleanup, Advanced Reactor Transition, River Corridor Waste Management, and 200 Area Remediation subprojects are outside the threshold. Detailed variance analysis explanations may be found in the applicable section.

**Cost Performance** — FY 2002 year-to-date cost performance reflects a 0.5 percent (\$1.3 million) unfavorable cost variance that is within the established 10 percent threshold. Subprojects outside the threshold are 300 Area Cleanup, Advanced Reactor Transition, River Corridor Waste Management, 200 Area Remediation, Plutonium Finishing Plant, and Near Term Stewardship. Detailed variance analysis explanations may be found in the applicable sections.

# **BASELINE PERFORMANCE STATUS** **FY 2002 COST / SCHEDULE PERFORMANCE – ALL FUND TYPES** **FY TO DATE STATUS (\$M)** **(FLUOR HANFORD, INC. ONLY)**

DATA THROUGH APRIL 2002

		Current Fiscal Year Performance (\$ x Million)					Annual Budget
		FYTD			Schedule Variance	Cost Variance	
		BCWS	BCWP	ACWP			
River Corridor Restoration							
3.1.2	300 Area Cleanup RC02	0.6	0.7	0.6	0.1	0.1	1.2
3.1.3	Advanced Reactor Transition RC03	0.9	1.0	0.7	0.1	0.3	1.9
3.1.5	River Corridor Waste Mgmt. RC05	2.0	2.2	1.8	0.2	0.4	3.7
3.1.6	300 Area Facility Transition RC06	22.6	22.8	21.4	0.2	1.4	38.4
Subtotal Restoration		26.1	26.7	24.5	0.6	2.2	45.2
River Corridor Final Closure and SNF							
3.2.3	Spent Nuclear Fuel RS03	97.7	94.4	101.9	(3.3)	(7.5)	172.2
Subtotal SNF		97.7	94.4	101.9	(3.3)	(7.5)	172.2
Central Plateau Transition							
3.3.1	200 Area Remediation CP01	5.1	4.2	2.9	(0.9)	1.3	15.7
3.3.2	Waste Management CP02	42.5	42.7	42.6	0.2	0.1	79.8
3.3.3	Plutonium Finishing Plant CP03	46.8	50.2	44.4	3.4	5.8	79.7
Subtotal Central Plateau		94.4	97.1	89.9	2.7	7.2	175.2
Site Integration & Infrastructure							
3.4.1	Site Integration SS01	16.9	16.9	16.1	0.0	0.8	29.8
3.4.2	Landlord & Site Services SS02	49.5	46.9	51.3	(2.6)	(4.4)	93.4
3.4.5	HAMMER SS05	2.7	2.9	2.7	0.2	0.2	4.8
Subtotal Site Integration		69.1	66.7	70.1	(2.4)	(3.4)	128.0
Site Stewardship							
3.5.1	Near Term Stewardship SC01	0.5	0.5	0.3	0.0	0.2	0.9
Subtotal Stewardship		0.5	0.5	0.3	0.0	0.2	0.9
Total PHMC Projects		287.8	285.4	286.7	(2.4)	(1.3)	521.5

**Notes:** Column headings [Budgeted Cost of Work Scheduled (BCWS), Budgeted Cost of Work Performed (BCWP), etc.] are defined in the glossary at the end of the report. The data is from the Hanford Data Integrator (HANDI) reports. The Annual Budget is FY2002 workscope only and does not include prior year scope. Additionally, some scope transfers that will occur in June 2002 are not reflected in the Annual Budget (e.g., CP01 has the scope transfer, SS03 and SS04 do not).

## BASELINE PERFORMANCE STATUS CONTRACT TO DATE (\$M) (FLUOR HANFORD, INC. ONLY)

The following table portrays the Fluor contract to date cost and schedule performance.

**DATA THROUGH APRIL 2002**

		Contract to Date Performance (\$ x Million)					Contract Period Budget
		CTD			Schedule Variance	Cost Variance	
		BCWS	BCWP	ACWP			
River Corridor Restoration							
3.1.2	300 Area Cleanup RC02	1.9	1.9	1.8	0.0	0.1	33.4
3.1.3	Advanced Reactor Transition RC03	2.7	2.6	2.0	(0.1)	0.6	7.7
3.1.5	River Corridor Waste Mgmt. RC05	6.5	6.6	5.8	0.1	0.8	27.1
3.1.6	300 Area Facility Transition RC06	68.2	67.3	64.0	(0.9)	3.3	340.0
Subtotal Restoration		79.3	78.4	73.6	(0.9)	4.8	408.2
River Corridor Final Closure and SNF							
3.2.1	S. Hanford Industrial Area	0.0	0.0	0.0	0.0	0.0	6.4
3.2.3	Spent Nuclear Fuel RS03	274.5	266.1	268.6	(8.4)	(2.5)	639.7
Subtotal SNF		274.5	266.1	268.6	(8.4)	(2.5)	646.1
Central Plateau Transition							
3.3.1	200 Area Remediation CP01	11.2	9.6	8.5	(1.6)	1.1	203.9
3.3.2	Waste Management CP02	146.5	142.2	137.9	(4.3)	4.3	606.0
3.3.3	Plutonium Finishing Plant CP03	149.8	143.8	141.9	(6.0)	1.9	459.2
Subtotal Central Plateau		307.5	295.6	288.3	(11.9)	7.3	1269.1
Site Integration & Infrastructure							
3.4.1	Site Integration SS01	33.9	33.7	32.0	(0.2)	1.7	175.5
3.4.2	Landlord & Site Services SS02	100.4	96.8	100.3	(3.6)	(3.5)	539.6
3.4.5	HAMMER SS05	9.0	8.9	8.4	(0.1)	0.5	29.2
Subtotal Site Integration		143.3	139.4	140.7	(3.9)	(1.3)	744.3
Site Stewardship							
3.5.1	Near Term Stewardship SC01	1.6	1.6	0.9	0.0	0.7	5.1
Subtotal Stewardship		1.6	1.6	0.9	0.0	0.7	5.1
Total PHMC Projects		806.2	781.1	772.1	(25.1)	9.0	3072.8

**Notes:** Contract period budget reflects the contractual funding profile (FY01 – FY06), plus/minus approved Baseline Change Requests. However, planned scope transfers from/to the River Corridor Contractor will be included once the transfers take place.

## FUNDS MANAGEMENT

### FUNDS VS. ACTUAL COSTS (\$000)

This chart reflects FH Project structure. This breakout is necessary to provide FH project managers with information specific to their areas of responsibility and accountability and to facilitate effective management of the funds within their control (obligated to the PHMC). Consequently, these figures will differ from those shown elsewhere (as generated in the PEM system).

FH actions (including subcontract reductions, work scope deferrals, and designated off ramps) identified to ensure that funding control points are not violated have been implemented. The revised FH allocation includes additional RL Site Integration Board funding. The potential overrun in the SNF Project, due to increased construction and production costs, is under evaluation. Additionally, an internal reprogramming action is still necessary to address excess funding remaining in PFP's W-460 Line Item. Other control point issues will be mitigated with a combination of RL and FH funding sources.

For purposes of funds management, the "Other" category includes all funding sources not suitable for redistribution within the Project Completion and Post 2006 control points.

Project	PBS	Total RL Funding	Revised FH Allocation	Project April Forecast	FH Allocation			RL Allocation		
					Project Completion	Post 2006	Other	Project Completion	Post 2006	Other
Spent Nuclear Fuel	RS03	\$181,614	\$176,161	\$180,679	(\$4,518)			\$935		
Plutonium Finishing Plant	CP03	\$76,426	\$84,695	\$85,433	(\$738)			(\$9,007)		
	CP03	\$2,264	\$570	\$566	\$4					\$1,698
<b>Subtotal PFP</b>		<b>\$78,690</b>	<b>\$85,265</b>	<b>\$85,999</b>	<b>(\$734)</b>			<b>(\$9,007)</b>		
River Corridor	RC06	\$38,966	\$37,585	\$36,757	\$828			\$2,209		
	RC02	\$1,393	\$1,032	\$1,012		\$20			\$381	
	RC05	\$2,968	\$3,229	\$3,103		\$126			(\$135)	
	RC01	\$2,790	\$2,790	\$2,790		\$0			\$0	
	CP01	\$12,325	\$18,287	\$18,616		(\$329)			(\$6,291)	
	RS01	\$80	\$80	\$80		\$0			\$0	
	SS03	\$1,200	\$0	\$0		\$0			\$1,200	
	SS04	\$1,724	\$1,724	\$1,724		\$0			\$0	
<b>Subtotal RC</b>		<b>\$61,446</b>	<b>\$64,727</b>	<b>\$64,082</b>	<b>\$828</b>	<b>(\$183)</b>		<b>\$2,209</b>	<b>(\$4,845)</b>	
Waste Management	CP02	\$82,838	\$80,879	\$80,954	(\$75)			\$1,884		
Advanced Reactor	RC03	\$2,285	\$2,285	\$1,528			\$757			
Landlord & Site Services	SS02	\$92,977	\$91,912	\$92,817	(\$905)			\$160		
HAMMER	SS05	\$5,944	\$5,503	\$5,159		\$344			\$786	
Site Integration	SS01	\$28,451	\$27,505	\$28,079		(\$574)			\$372	
Near Term Stewardship	SC01	\$1,300	\$1,308	\$1,365		(\$57)			(\$65)	
<b>TOTAL EXPENSE</b>		<b>\$535,545</b>	<b>\$535,545</b>	<b>\$540,662</b>	<b>(\$5,404)</b>	<b>(\$470)</b>	<b>\$757</b>	<b>(\$3,819)</b>	<b>(\$3,752)</b>	<b>\$1,698</b>

## **MILESTONE PERFORMANCE**

Milestones represent significant events in project execution. They are established to provide a higher level of visibility to critical deliverables and to provide specific status about the accomplishment of these key events. Because of the relative importance of milestones, the ability to track and assess milestone performance provides an effective tool for managing the PHMC EM cleanup mission. These milestones are consistent with the FH contract.

FYTD milestone performance (Enforceable Agreement [EA], U.S. Department of Energy- Headquarters [DOE-HQ], and RL) shows that five milestones were completed on or ahead of schedule, one milestone was completed late, and two milestones are overdue.

In addition to the FY2002 milestones described above, there is one overdue milestone from FY2001 [PFP (Section J)]. Further details regarding this milestone may be found in the referenced Project Section.

FY 2002 information is depicted graphically on the following page. For additional details related to the data, prior year milestones, and outyear milestones, refer to the relevant project section titled "Milestone Achievement."

FY 2002 information reflects the September 30, 2001 Baseline. Changes in both the number and type of milestones from month to month are the result of Baseline Change Requests (BCRs) approved during the year.

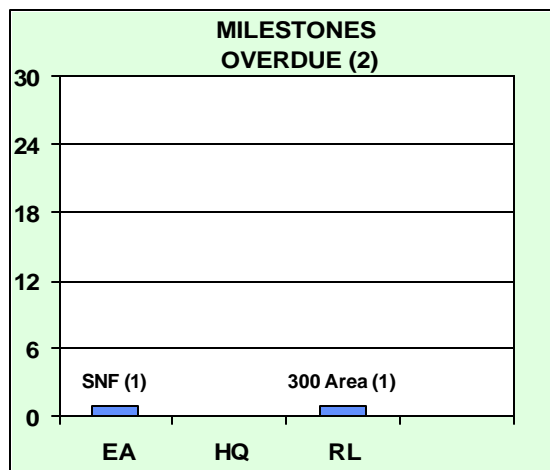
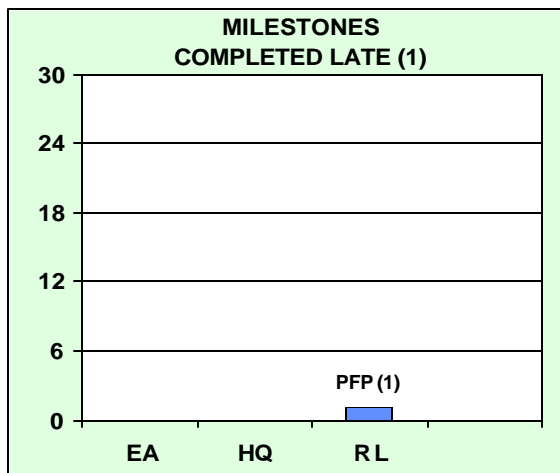


## TOTAL ALL HANFORD PROJECTS MILESTONE ACHIEVEMENT FH Contract Milestones

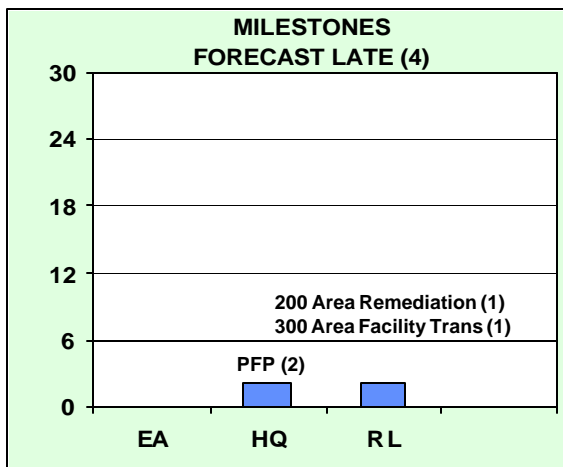
MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			Total FY 2002
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	3	0	0	1	0	0	0	4
DOE-HQ	0	0	0	0	0	0	2	2
RL	2	0	1	1	0	4	2	10
<b>Total Project</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>16</b>

## MILESTONE EXCEPTIONS

### FISCAL YEAR TO DATE



### REMAINING SCHEDULED



These charts provide detail by project and milestone level / type for milestones

- Completed Late
- Overdue
- Forecast Late
- Detailed information can be found in the individual project sections



## SAFETY OVERVIEW

The focus of this section is to document trends in occurrences. Improvements in these rates are due to the efforts of the PHMC workforce as they implement the Integrated ES&H Management System (ISMS), work towards achieving Voluntary Protection Program (VPP) "star" status, and accomplish work through Enhanced Work Planning (EWP). Safety and health statistical data is presented in this section.

### Significant Safety and Health Events

#### PHMC Level

**Occupational Safety & Health Administration (OSHA) Recordable Case Rate:** The FH Team OSHA Recordable Rate is stable at the current baseline of 1.5 cases per 200,000 hours. This is significantly below the DOE Complex average of 2.3. FH Team projects are continuing to implement aspects of their Safety Improvement Plans and are incorporating recommendations provided from the FH Safety Summit. As a result of the Safety Summit, analysis of injury types, and the 2002 Safety Exposition, FH is focusing its injury reduction efforts into near miss reporting and healthy lifestyles promotions.

**Days Away From Work Case Rate:** The current safe work hour count for the FH Team is 4,107,587 hours. The past six months have been below average; a seventh will be significant.

**DOE Safety Cost Index:** The DOE Safety Cost Index has continued to lower and has shown a significant improvement. This is a direct result of an overall reduction in workplace injuries and the severity of existing injuries. The FH Cost Index of workplace injuries is less than six cents per hour worked. The DOE Complex average is 9.7 cents.

#### Subproject Level

The **Plutonium Finishing Plant (PFP)** subproject has accumulated 412,711 safe hours. The FY 2002 OSHA Recordable Case Rate remains stable at the current baseline average of 2.4 cases per 200,000 hours worked. The DOE Safety Cost Index has had a new baseline average of 8.3 cents per hour. The subproject continues to work injury reduction efforts in through their Safety Improvement Plan and Employee Zero Accident Council in order to achieve FH safety expectations.

The **300 Area Facility Transition** (WBS 3.1.6) subproject (formally called the River Corridor Project) has achieved 339,095 safe work hours. The OSHA Recordable Case Rate remains stable at the current baseline average of 1.9 cases per 200,000 hours worked. The subproject continues to pursue injury reduction improvements through their Safety Improvement Plan and Employee Zero Accident Council in order to achieve FH safety expectations.

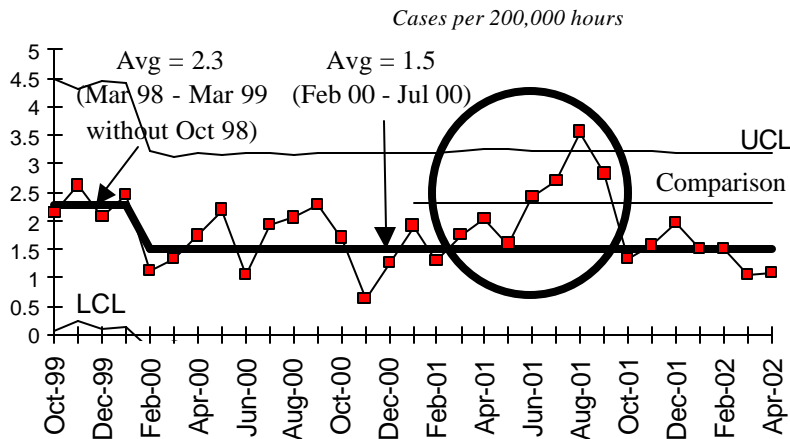
The **Spent Nuclear Fuel (SNF) Project** has achieved 4.5 million safe work hours. The OSHA Recordable case rate is stable on the improved baseline of 1.0 cases per 200,000 hours worked. SNF has continued to demonstrate excellence in safety throughout the movement of Fuel and the transitioning to multiple shifts. SNF continues to post one of the best project safety performances of the site.

The **200 Area Materials and Waste Management** (WBS 3.3.2) subproject (formally called the Waste Management Project) has achieved 3.6 million safe work hours. There has been a significant reduction in the OSHA recordable case rate, and a new baseline was established at 0.8 cases per 200,000 hours worked. The subproject has, for the first time, achieved an injury reduction that has met the FH Team expectations and is one of the best project safety performances of the site. This is attributed to their Employee Zero Accident Councils and their pursuit of Voluntary Protection Program recognition.

Due to space constraints, FY 1996 through FY 1998 data is not portrayed on the following graphs.

## Total OSHA Recordable Case Rate

Green

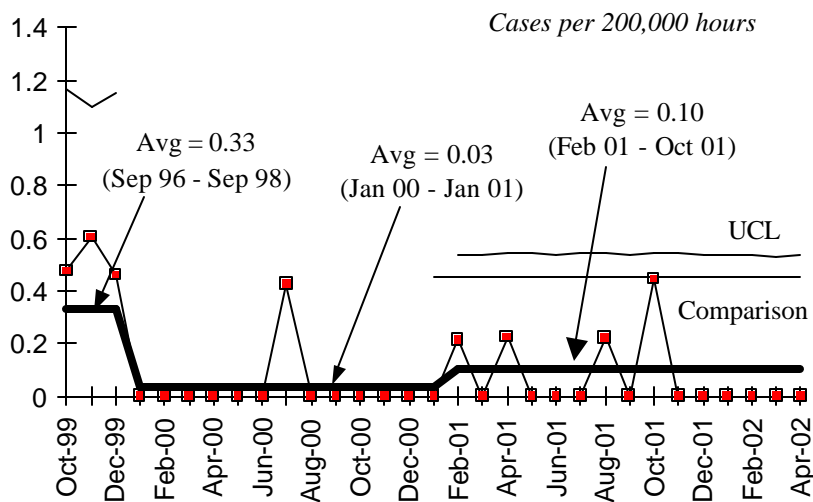


FY 2001 = 2.0  
FY 2002 to date = 1.4  
DOE Complex Comparison  
Average = 2.3 (CY01)

The OSHA Recordable Case Rate appears to have returned to the previous baseline of 1.5 cases per 200,000 hours, which is better than the DOE comparison rate of 2.3 cases per 200,000 hours.

## OSHA Days Away from Work Case Rate

Green

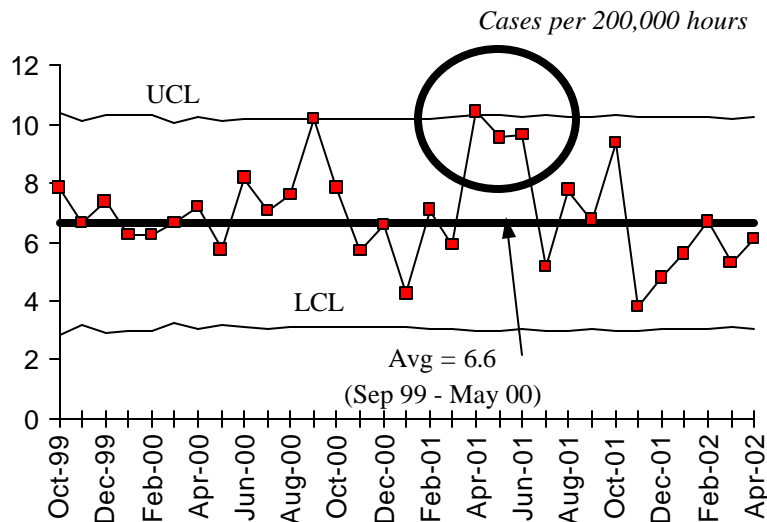


FY 2001 = 0.05  
FY 2002 to date = 0.06  
DOE Complex Comparison Average = 0.45 (CY01)

The current safe work hour count for the FH Team is 4,107,587 hours. A case from December 2001 has received lost away workdays in CY 2002. As this case occurred in the previous calendar year, the classification of the case remains unchanged due to the new OSHA reporting requirements. However, for Fluor corporate reporting purposes, the safe hours count has been reset to this case. The past 6 months have been below average; a 7th will be significant.

## FIRST AID CASE RATE

Green

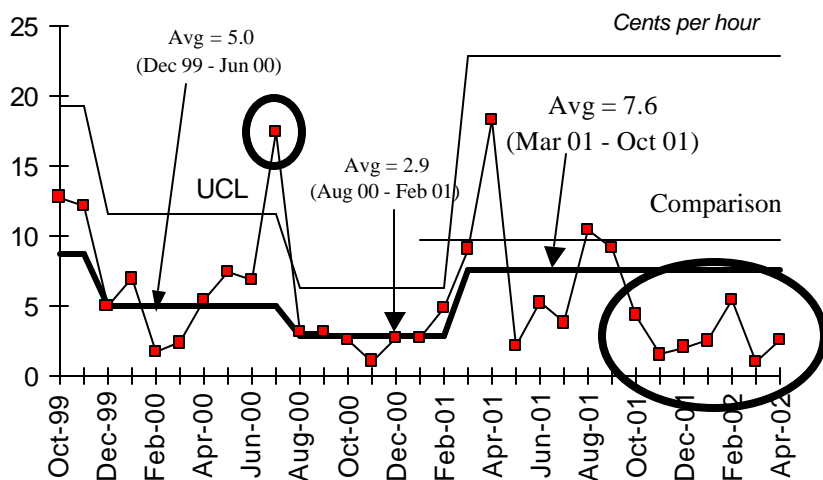


First Aid Rate undergoes seasonal cycles. Increases occur in warmer weather due to insect and animal encounters, and due to wind related minor injuries. Such an increase did occur this past summer. Hanford is especially susceptible to wind borne debris injuries due to the site wildfire in June 2000. First Aid case rate has remained relatively stable, a good indicator that injuries are not being under-reported.

Fiscal year calculations are not included as DOE does not publish a comparison rate, and comparisons of partial fiscal year data to prior years would not be appropriate due to the cyclical trend in the data.

## DOE SAFETY COST INDEX

Green



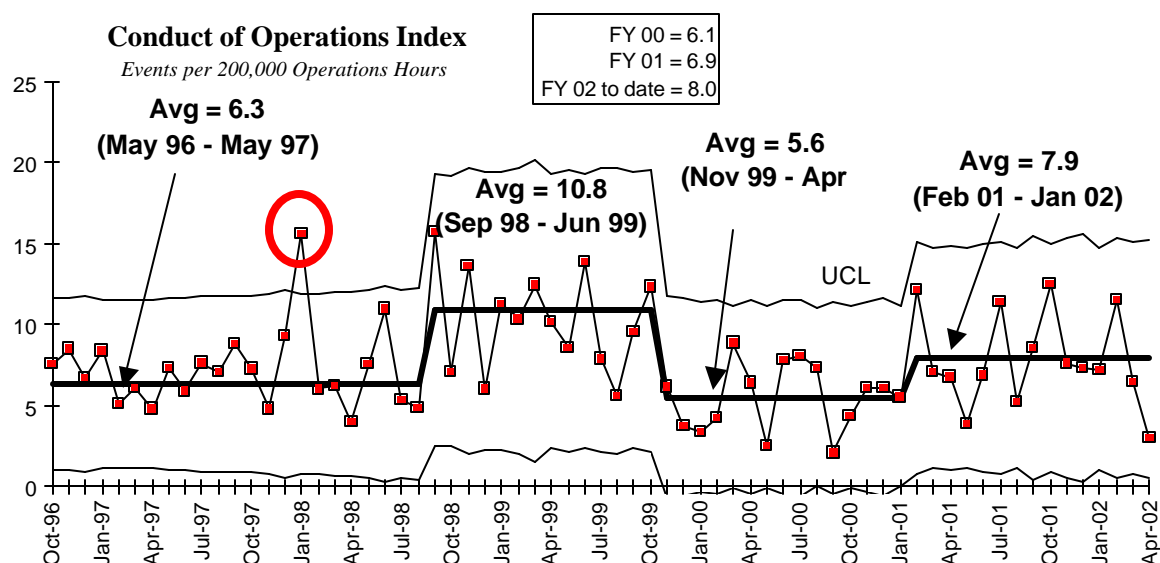
FY 2001 = 5.9  
FY 2002 to date = 2.8  
DOE Complex Comparison  
Average = 9.7 (CY01)  
The past seven months in a row have been below average, a significant decrease.

Current Calendar's Year data continue to be corrected as further days accumulate on any work restrictions or lost days.

## CONDUCT OF OPERATIONS

New information for October 2001 placed the data above the Upper Control Limit from the 5.6 baseline. Since there had already been one signal of increase, this new signal was used as justification for establishment of a higher baseline.

The current month does tend to be artificially low as it can take up to 45 days to assign a root cause to an occurrence report, and the majority of the event types in the index are root cause generated.



## BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

### Breakthroughs

**Monolithic Removal of 327 Hot Cells** — To support accelerated 300 Area closure, River Corridor (RC) is integrating decommissioning and demolition with deactivation activities where practical. Intact removal of the 327 hot cells appears to be technically feasible, to have potentially significant ALARA benefits, and results in schedule/cost reduction. Certification that the hot cells can be disposed of as non-Transuranic waste is key to adopting monolithic removal as the technical baseline. In support of this initiative, RC was successful in obtaining Accelerated Site Technology Deployment (ASTD) funding (\$935K) to purchase in-situ characterization instruments that will lead to the eventual Low Level Waste certification. Procurement documents have been prepared for four instrument systems that will be used to locate, identify, and quantify residual contamination in the hot cells. Suppliers have been authorized to begin constructing two of the systems.

**Permit By Rule Treatment at 300 Area Treated Effluent Disposal Facility (TEDF)** — FH investigated the potential to treat limited categories of liquid non-radioactive hazardous wastes using the existing capabilities of the 300 Area TEDF by applying a permit exclusion available within the waste regulations. Treatment of hazardous wastes at TEDF could provide a low-cost option for disposal of some wastes currently sent off-site. While initial implementation activities are planned through the remainder of FY 2002, full implementation will be delayed to FY 2003 due to funding constraints.

**Nondestructive Evaluation (NDE) of Contamination in the K East Basin Walls and Floors** — A significant activity necessary to deactivate the 100 Area KE Basin is to characterize the level of contamination in the basin's unsealed concrete walls and floor. This characterization data will be used to

help determine the methods to be applied in completing the deactivation of the basin, once fuel and sludge have been removed.

The SNF Project will be using a nondestructive (gamma scanning) technique and detector system, developed by the Pacific Northwest National Laboratory, to acquire data on the depth of radionuclide penetration in the basin's concrete walls and floors. This is the first time the NDE technique will be used to obtain characterization data with the facility in normal operation, with its full inventory of fuel, sludge and contaminated water. If successful, the data will be used, in conjunction with other information, to determine which deactivation methods can realistically be used to remove/reduce the radiological dose/contamination, as well as to determine which basin areas are in the most need of mitigation. This detection system has been constructed, tested under laboratory conditions and is ready for deployment into the KE Basin.

**Environmental Compliance Program** — During the FH Integrated Safety Management System (ISMS) Phase II verification, it was noted that opportunity existed in the Environmental, Safety, and Health (ES&H) subject area to improve environmental integration in operations and maintenance communications. In January 2001, the FH Environment and Regulation organization began an effort to improve worker environmental understanding. The 'E' awareness initiative is intended to improve environmental compliance and stewardship practices in daily work activities at the Hanford Site. As part of the initiative, the Environmental Stewardship Award has been developed to recognize FH projects and facilities that demonstrate strong environmental performance above and beyond environmental requirements. It is the first of its kind in the DOE complex. The award selection criteria include input from environmental regulators and DOE staff, reportable environmental incidents, participation in recycling efforts, Facility Evaluation Board assessment results, and responsiveness to corrective actions. In April 2002, four facilities and one project elected to participate in the award application process; they were T-Plant, PFP, 222-S Laboratory, Waste Sampling and Characterization Facility (WSCF) and the River Corridor Project.

**Information Resource Management - Telecommunications Terminal Loop Elimination** — The installation of a fiber multiplexer for voice circuits to support the elimination of leased terminal loops has been completed. This completes the terminal loop projects, which have accomplished a Hanford Site savings of approximately \$300,000 per year in reduced leased telecommunication line costs.

**Information Resource Management - Virtual Knowledge Center / Integrated Document Management Systems (VKC/IDMS) Evaluation Phase Complete** — The evaluation phase of the Livelink software was officially completed on April 12, and the decision was made by the FH Chief Information Office to purchase Livelink software through a lease agreement over the next four years. This purchase will allow the VKC/IDMS project to move forward with planning for projects that require a significant number of named users to have access. The Livelink software includes the following functional components:

- Livelink (core document management, workflow, tasks, collaboration)
- iRIMS (records management)
- Livelink Desktop (integration with Micro Soft Office)
- Livelink ePublisher Transit Central (convert to Portable Document Format [PDF] and publish in Livelink or to web)
- Livelink eSign (security/signature integration with workflow)

**Occurrence Reporting** — FH Emergency Preparedness (EP) has been working with RL in an effort to enhance the quality of occurrence reports required by DOE O 232.1A, "Occurrence Reporting and Processing of Operations Information." EP will conduct an occurrence reporting workshop in late May to provide recent feedback to FH projects resulting from DOE-HQ/EM and RL reviews of final occurrence reports. EP (Occurrence Notification Center) will also be providing a review process for all FH occurrence reports and a process to track occurrence report quality improvements.

## Opportunities for Improvement

**Flowmeter** — SNF engineers have identified the replacement of the magnetic flowmeter to an ultrasonic flowmeter used for the P-2 pump. This will allow the production to regain wash time by reducing it from 15 minutes to between five and ten minutes in the Primary Clean Machine (PCM). This replacement and testing is expected to be complete by the end of May 2002.

**Processing Improvement** <sup>3</sup>/<sub>4</sub> PFP and contractor staffs have identified opportunities for improving the material control and accountability (MC&A) inventory process at the PFP. The evaluation resulted in three primary potential corrective action areas; Operations, Safeguards and Laboratory Measurements. A schedule has been developed to review and complete the recommendations for the MC&A Productivity Improvement Task Team.

**Processing Improvement** <sup>3</sup>/<sub>4</sub> The Stabilization & Packaging Equipment (SPE) system Process Qualification Application is being prepared for RL submittal in mid May. This plan will enable the SPE system, once qualified, to perform Loss On Ignition/Thermogravimetric Analyzer analysis on a representative sampling of canned items rather than all items. This is significant since the processing throughput is more limited by the LOI/TGA measurement throughput than either the furnace or canning capacity. Without RL approval of the Process Qualification Application the May 2004 commitment to complete stabilization and packaging of oxides 30 wt percent Plutonium/Uranium will be in jeopardy.

**Information Resource Management - Transition of Bechtel Hanford Inc. (BHI) Central Plateau Work Scope to the PHMC** <sup>3</sup>/<sub>4</sub> A significant challenge is the transition of the Central Plateau work scope, including BHI personnel and their IT resources into the PHMC's Hanford Local Area Network (HLAN), documentation, and databases. Significant planning is underway to transition nearly 200 people to the new environment, over 8,000 electronic document files, and several databases, within a short duration and inadequate funding.

**Two Technologies Proposed to Support Life Cycle Cost Reductions** <sup>3</sup>/<sub>4</sub> Analytical Services has proposed two technologies to support life cycle cost reductions for Hanford's high-level waste tanks mission acceleration initiative. One is clean salt (sodium nitrate) removal before waste treatment (sodium nitrate is a high percentage by volume in the waste tanks) and the other is Chromatographic Retrieval of wastes, which if proven, could selectively remove various constituents through successive water washes. Both have been demonstrated in the laboratory and were selected by CHG as two of the top ten alternatives for saving money and time in waste treatment. Further evaluation will be done to see if these and/or other technologies warrant funding for planned deployment in 2005. The Tank Focus Area has also requested a proposal be made to the Office of Science and Technology for the second of these technologies.

**Procedure Coordination** — The Carlsbad Field Office (CBFO) review of the procedures incorporating of the new Waste Isolation Pilot Plant Waste Acceptance Criteria (WIPP WAC) is underway. All comments from CBFO must be dispositioned and the procedures approved by May 17, 2002. If the procedures are not approved, NDA activities for the Residues Project will be suspended after May 17, 2002.

**Thermal Imaging Technology for Inspection of Export Water System** — New technology is being proposed for the inspection and evaluation of the 25-mile Export Water System (EWS). About every 2,000 feet along the EWS there would be an excavation down to buried access points and a robotic camera would be sent down the line to film the inside of the pipe. In researching alternate methods for identifying water leaks and quantifying which water lines need to be replaced on a priority basis, a proposal was made to use fly over and Thermal Imaging Equipment to determine below-ground characteristics of systems without excavating and/or visual inspection of the inside of the pipe. A fly over of the EWS using Thermal Imaging Equipment can be accomplished for about \$25K to \$30K and would cut down the amount of the piping system that would need to be visually inspected from inside.

Utilization of this technology is expected to save approximately \$450,000 (preliminary estimate based on inspecting approximately half of the 25-mile piping system on the inside).

## ISSUES

### **Accelerated schedule for Pressurized Water Reactor (PWR) fuel assembly shipments —**

Meeting the accelerated 324 schedule for five PWR fuel assembly shipments by September 30, 2002 vs. December 2002 necessitates recovering lost time. The Spent Nuclear Fuel Project (SNF) performed final procedure walk-downs in parallel with pressurized water reactor fuel handling acceptance test procedures (ATP) to recover 11 days of schedule slippage caused by component design and manufacturing issues. As a result, the project is three days behind schedule, and will continue the procedure review/approval cycle in an effort to complete full schedule recovery.

**Equipment reliability is a challenge for sustaining SNF movement** — Continued equipment failures may negatively impact meeting fuel movement commitments. The Primary Clean Machine (PCM) basket failure was unexpected. Modifications are being made to install the KE Basket as soon as possible.

**Shippingport fuel movement schedules and readiness to receive K Basin sludge are impacted by the Operations Readiness Review (ORR) delay** <sup>¾</sup> A recovery plan has been developed and implemented. Key elements include enhanced staffing, increased matrixed support, and the use of onsite and offsite mentors. A management self-assessment is in progress. A readiness will be declared for contractor operational readiness review to be conducted in June 2002.

**There is no alternative moisture measurement system in place to support processing of plutonium alloys and impure oxides** — Completion of solutions and polycube processing and stabilization activities will be delayed approximately two and one-half months. RL has authorized use of the TGAs in the LOI mode with inert gas in glovebox HA-20MB for impure oxides. Critical Mass Laboratory (CML) and precipitated filtrates can now be processed and sampled for moisture content in 234-5Z. This action is complete.

**Lack of MLLW Treatment Capacity** — ATG's financial status has adversely impacted production rates. FH is currently working with ATG to develop a new fourth quarter FY 02 contract with an option for FY 03 based on repricing by ATG. LLW compaction contract will complete this fiscal year. FH is also evaluating the use of a DOE Broad Spectrum contract while continuing onsite treatment/disposal efforts.

**Buried TRU Drum Retrieval Behind Schedule** — The Retrieval Document Safety Analysis (DSA) was submitted, and discussions with RL are ongoing. FH is working to resolve the DSA comments, and incorporate the outcome in the Retrieval Project Plan.

## EM CORPORATE PERFORMANCE MEASURES

This information is provided quarterly.

## EM LIFE CYCLE PERFORMANCE MEASURES

This information is provided quarterly.



## UPCOMING PLANNED KEY EVENTS

The following key events are extracted from the authorized baseline and are currently expected to be accomplished during the next several months. Most are Enforceable Agreement (EA), DNFSB or DOE-HQ Milestones.

### 300 Area Remediation

**SNF Transfer** — Decontaminate initial NAC-1 Cask and International Standards Organization (ISO) container by April 29, 2002 (This activity continues to slip due to subcontractor delays; a recovery plan is in place).

**Effluent Tank** — Replace effluent tank by April 2002. (Deferred to 2003 due to funding constraints.)

**Treated Effluent Disposal Facility (TEDF) Database Servers** — Upgrade TEDF database servers by April 2002. (Deferred to May 2002 to include related upgrade.)

**324/327 Buildings** — Complete 26.5 percent remaining deactivation scope by June 30, 2002.

**300 Area Miscellaneous Contaminated Facilities** — Shutdown 333 Building fire protection system by September 2002 (This activity delayed due to higher priority work).

**Contract Transition** — Support transfer of FH scope to River Corridor Closure Contract (RCCC) on September 30, 2002, or 90 days preceding contract award.

### Spent Nuclear Fuel

**Fuel Movement** — Continue removal and processing of SNF. Continue implementing process improvements to decrease time necessary to load and process fuel in MCOs.

**Sludge Water System (SWS) Design** — Complete large diameter containers (LDC) trailer 100 percent design by June 19, 2002.

**Fuel Transfer System (FTS) Construction** — Complete FTS Construction by June 2002.

**Interim Storage Area (ISA) Pad** — Complete Light Water Reactor (LWR) SNF receipt at 200 Area ISA Standard Startup Review in July 2002.

**SWS Construction** — Complete first Sludge Transfer System (STS) cask fabrication July 8, 2002. Receive cask and container for sludge in August 2002. Complete SWS construction by September 30, 2002.

### 200 Area Remediation

**200 Area Shutdown Facilities** — Transfer PUREX and B Plant facilities from BHI to FH by June to allow initiation of equipment removal. Delayed from April due to transfer negotiations.

**Equipment Disposition Project** — Ship the Ion exchange columns by August 2002.

## **200 Area Materials & Waste Management**

**Accelerate Readiness to Receive SNF K Basin Sludge** — 1) Implement a recovery plan for the Readiness Assessment for movement of Shippingport (PA) fuel, 2) Support activities to receive and store K Basin sludge, and 3) Accelerate T Plant Canyon cell cleanout.

**MLLW Treatment** <sup>3</sup>/<sub>4</sub> Shipments scheduled in May should conclude returns of debris waste treated at ATG. Contract negotiations are progressing to allow additional non-thermal waste treatment during fourth quarter FY 2002 and during FY 2003. Efforts continue to secure technology demonstration funding to perform thermal desorption treatability tests at Perma-Fix.

**Waste Isolation Pilot Plant Waste Acceptance Criteria (WIPP WAC) Implementation** <sup>3</sup>/<sub>4</sub> The proposed revision of the WIPP WAC is required to be implemented by May 17, 2002. The revision requires significant changes in the non-destructive assay and transportation activities of the Transuranic (TRU) Program affecting both WRAP and PFP TRU waste processing.

**TRU Program Recertification Audit** <sup>3</sup>/<sub>4</sub> The recertification audit of the Hanford TRU Waste Program is scheduled for June 24-28, 2002. The annual audit is required to maintain the certified status of Hanford's TRU Waste Program and retain the ability to certify and ship TRU waste to the Waste Isolation Pilot Plant.

**TRU Waste Retrieval** <sup>3</sup>/<sub>4</sub> Planning is underway for a TRU Retrieval mockup. The mockup will include clean drums and boxes in a configuration similar to the retrieval trenches, and will allow operations personnel to validate retrieval planning efforts prior to excavating TRU drums. Expect to incorporate the Documented Safety Analysis (DSA) comments and receive the Safety Evaluation Report from RL approving the DSA by June 30, 2002.

**Plutonium Finishing Plant Support** — Continue to support residues processing with shipment of the new Sand, Slag and Crucible waste stream through FY 2003.

**300 Area Cleanup Support** — Continue support to the 324 Fuels Removal Project, 327 Facility Cleanout, and the 300 Area Accelerated Closure Project.

**Waste Encapsulation and Storage Facility (WESF) Operations** <sup>3</sup>/<sub>4</sub> Complete removal of chemical lines in the Aqueous Makeup Unit (AMU). Begin K-1 filter change. Support the accelerated capsule disposition initiative.

**Liquid Waste Processing** — Continue groundwater processing at the 200 Area Effluent Treatment Facility after completion of 242-A Cold Run Campaign. Two 242-A evaporator campaigns are scheduled for late summer.

## **Plutonium Finishing Plant**

**Residues Processing** — Complete FY 2002 processing and packaging of Sand, Slag & Crucible material in May 2002.

**Solutions processing** — Complete solutions stabilization and packaging by August 31, 2002.